<u>R E M A R K S</u>

Claims 1-7, 9-12 and 14-16 were pending in the application and are under consideration. In the Office Action of August 2, 1999, the claims were rejected in view of U.S. Patent No. 5,742,816 to *Barr, et al.*

In response, independent claims 1, 7 and 12 have been amended and new claims 7 and 18 posed.

The amendments to the claims have been made to clarify the nature of the invention in an effort to disabuse the examiner of what appear to be misunderstandings of the prior art.

As explained in the specification, the prior art understood two basic types of relevant information retrieval systems. One type can be referred to as an archival system in which queries are run against an archive of previously parsed documents. The other type can be referred as a filtering system in which a query is run against an individual incoming document, i.e., a document is evaluated "on the fly."

The two systems generally utilized different algorithms and schemes and are incompatible.

The present invention, relates to the second type of information retrieval systems.

The examiner's rejections seem based on a differing use of terminology, specifically, the use of the word "filtering." The examiner uses the term in a general sense such as "winnowing." However, the patent application, consistent with the relevant technical literature, uses the word to name the particular type of document processing to which the invention is directed. Another equivalent term or phrase with which the examiner may by familiar is "selective dissemination of information" (SDI).

As was previously pointed out, *Barr, et al.* relates to archival document retrieval systems in which a single query is run against an archive of documents. *Barr, et al.* explicitly states that the archive contains "a plurality of document records." Col. 3, lines 60-67. *Barr, et al.* further states that "a single search query is received. Col 4, lines 8-14.

Again, different methods are required in the two document retrieval systems. Documents and queries cannot simply be exchanged. For example, queries do not

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satisfy the natural language syntax, semantics, and discourse conventions expected by systems such as that of *Barr, et al.*

With respect to the rejection of the claims, the claims clearly require the parsing of a document as it is received into an inverted list of the terms contained therein, a profile parser for parsing user queries into query nets representing the terms and operators of the queries and a comparator for comparing the inverted list for an incoming document against the previously generated query net and providing as an output an indication as to whether the incoming document matches a user query.
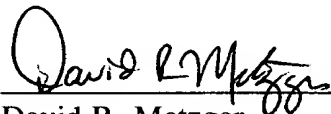
By using recursive statistical inference (See, page 9, lines 15-22), a single document is compared to a plurality of queries, and those queries for which there is a sufficient likelihood of no matching, further evaluation is disregarding. This clearly speeds up the overall process, as explained and shown in the application.

To be sure, statistical inference in and of itself is not new. However, using recursive statistical inference against structured queries (i.e., with terms and operators) is new and nonobvious. The examiner has not, and it is submitted cannot, point to any teaching or suggestion to do so.

What makes recursive statistical inference especially practical is the introduction of the use of partial parsing of an incoming document and threshold matching determination. This partial parsing concept is included in claim 2 and new claim 18.

In view of the foregoing, it is submitted that the claims 1-7, 9-12 and 14-18 are patentable and that the application is in condition for allowance. Notice to that effect respectfully is requested.

Respectfully submitted,

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